VARYTEC

User manual

EASY MOVE LED xs

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1. Safety Information

- The usage of this device is only allowed for indoor use.
- The warranty expires in case of manual changes at the device by the user.
- The device may only be repaired by professionals.
- Only use fuses of the same type as the original and only use original spare parts.
- To prevent fire and electric shock, protect the device against rain and humidity
- Disconnect main power plug before opening the casing.

1.1. Hints for safe and faultless use

Care of heat and high temperatures!

Place the device where it is not exposed to extreme temperatures, humidity or dust. Only use the device in ambient temperature between 5°C (41°F) - 35°C (95°F). Protect the device against sunlight and sources of heat.

Protect the device against humidity, water and dust!

The device should be place where high humidity does not dominate. Do not place liquids on or next to the system.

Only place the device on solid surfaces!

Place the device on solid surfaces, to avoid vibrations.

Do not use chemical cleaners!

Metal parts can be cleaned with a moist cloth. Before cleaning the device, always pull out the mains power plug!

If the device does not work correctly!

The user should not try, to maintain the device autonomously. All repairs and service should be realized by a qualified technician.

Handle the mains cable with care!

Never pull at the mains cable to disconnect the device! If the device is not used for a long time period, pull the plug of mains cable out of the socket.

Attention!

The warranty claim expires, when damages are caused by disregarding this user manual. The manufacturer and importer does not assume liability for consequential damages at all. Only qualified and trained technicians are allowed to work at electric parts of the device. All electrical and mechanical connections have to be mounted according to the european safety standards.

2. Introduction

2.1. Controllable features

- Control with 5 or 12 DMX- channels
- 540° Pan/270°Tilt
- RGB color-mixing
- Gobo-wheel with 9 gobos and gobo shake-function
- Adjustable electronic strobe
- Adjustable electronic dimmer
- Adjustable speed for Pan/Tilt, color-mixing and color-presets
- Pre-programmed movements, controlled by DMX or master-slave mode

2.2. Additional features

- The user can select between basic and advanced mode.
- Selectable pan and tilt range

  Pan 540°, 360°, 180°

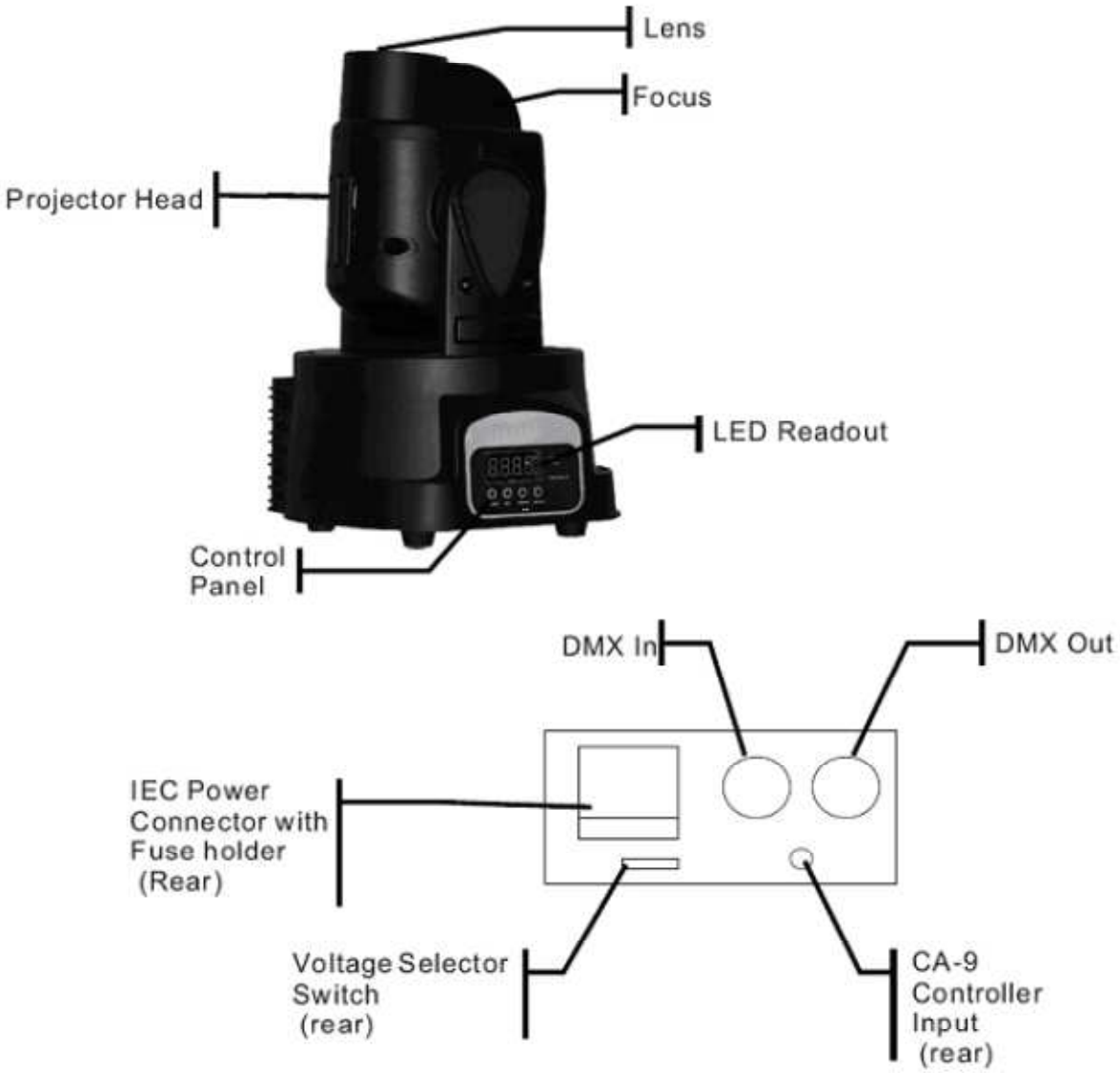
  Tilt 270°, 180°, 90°
- Compact and light
- LED-display with rotatable menu
- Function to reset the device to factory settings
- Automatic on/off function for the display
- Invert pan/tilt
- Fan-cooled

3. DMX channels

12 channel mode for wash light		13 channel mode for spot	
Channel	**Function**	**Channel**	**Functon**
1	Pan	1	Pan
2	Pan fine	2	Pan fine
3	Tilt	3	Tilt
4	Tilt fine	4	Tilt fine
5	Speed pan/tilt	5	Speed pan/tilt
6	Dimmer/strobe	6	Dimmer/strobe
7	Red	7	Red
8	Green	8	Green
9	Blue	9	Blue
10	Colors	10	Colors
11	Color speed	11	Color Speed
12	Movement	12	Movement
		13	Gobo

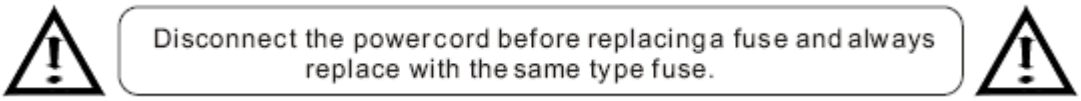
4 channel mode for wash light		5 channel mode for spot	
Channel	**Function**	**Channel**	**Functon**
1	Pan	1	Pan
2	Tilt	2	Tilt
3	Dimmer/strobe	3	Dimmer/strobe
4	Color	4	Color
5		5	Gobo

4. Product overview



5. Technical specifications

5.1. Change internal Fuse



Push out the fuse-holder with a screwdriver. Exchange the fuse only by one of the exact same type. Push the fuse-holder back on its origin position and connect the mains cable to the socket again.

5.2. Link devices

You need 3-pin DMX cables to realize a lightshow with two or more devices. However you can run the devices also by master/slave control. The maximum quantity of devices, in this mode, is given by the maximum usable channels of DMX512. The addition of all fixture channels must not be higher than the maximum channels of DMX512.

Important: Devices, which are controlled by DMX512, are connected by a serial cable. For a proper operation, the EIA-485 provides, to run not more than 32 devices in one DMX line. If you want to use more than 32 devices, you need to use a DMX-splitter.

Maximum recommended link distance: 500m
Maximum recommended devices in on DMX line: 32

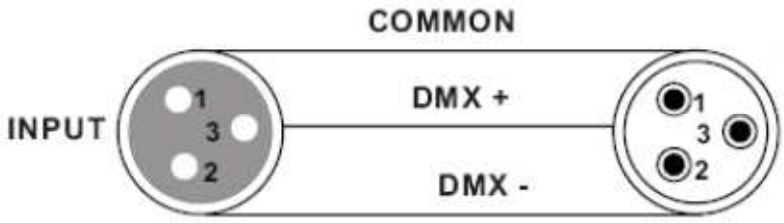
6. DMX Data Cable

Only use a cable, which is conforming to the RS-485 standard. Standard microphone cable cannot transfer DMX signal correct over long distances. The cable should fulfill following requirements:

2 conductors + ground (3-pole)
Maximum capacity between conductors 30pF/ft.
Maximum capacity between conductor and ground 55pF
Maximum electric resistance 20 Ohm/1000ft
nominal impedance 100 – 140 Ohm

6.1. Cable-connectors

The cables must have a male DMX connector on one side, and a female on the other side.
Pin-assignment:



Attention: Avoid contact between “common” and the ground of the device. This could produce a ground loop and your device could react irrationally. Test the function of the cables with a cable-tester before usage.

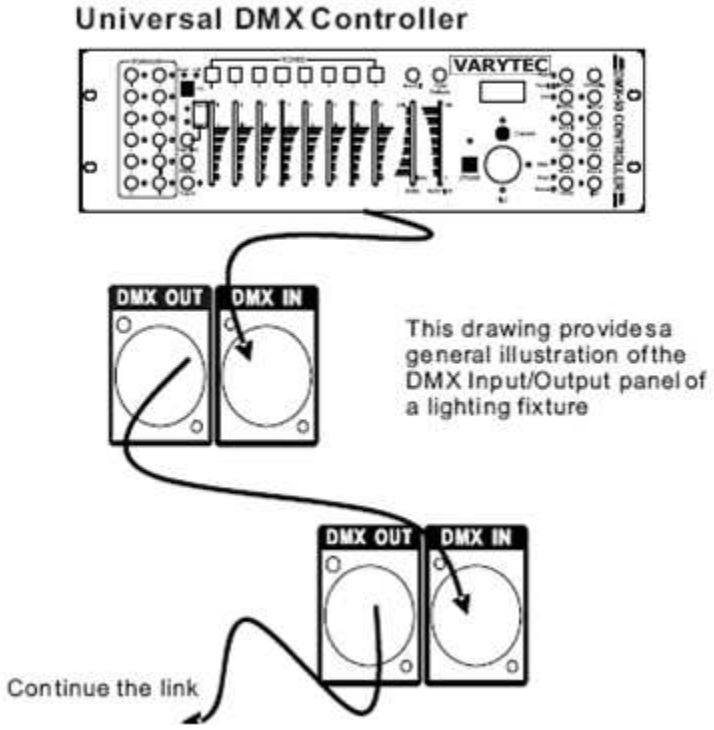
6.2. 3-pole to 5-pole adapter

If you use a controller with 5-pole output, you need a 3-pole to 5-pole adapter. The list below shows a possible configuration.

Conductor	3-pole female (output)	5-pole male (Input)
ground	Pin 1	Pin 1
Data (-)	Pin 2	Pin 2
Data (+)	Pin 3	Pin 3
Do not use		Pin 4
Do not use		Pin 5

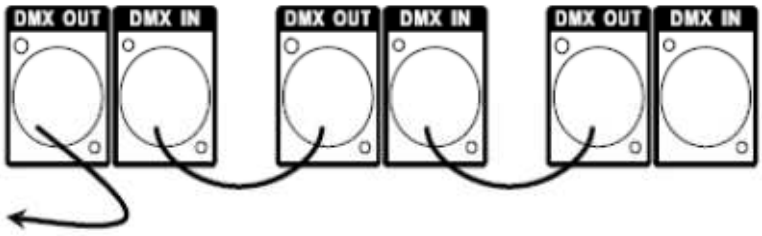
7. Configuration of Connection

1. Connect the 3-pole connector of the DMX cable with the 3-pole output of the controller.
2. Connect the female connector of the cable with the input of the first device.
3. Then go on by connecting the output of the device with the input of the next device.



8. Master/Slave linking the devices

1. Connect the 3-pole male connector of the DMX cable with the 3-pole output the first device.
2. Then connect the female connector of the cable with the input of the second device.
3. Then go on by connecting the output of the each device with the input of each next device.



9. Setup

9.1. Orientation

The fixture can be used in every position, as long as enough ventilation is given.

9.2. Rigging

It is important that the ventilation doesn´t get limited. Only use fitting “C”- or “O”-clamps for hanging devices. Loosen the clamps, adjust the angle of the devices and tighten the clamps again.

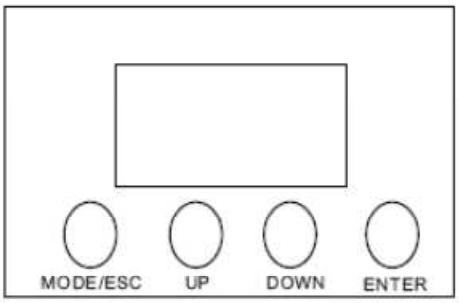
- Select the place of rigging, that you are able to change the illuminant, respectively to maintain the device.
- Always use safety steel cables.
- Never place the device at locations, where it is exposed to rain, high temperature changes or humidity.

10. Operation settings

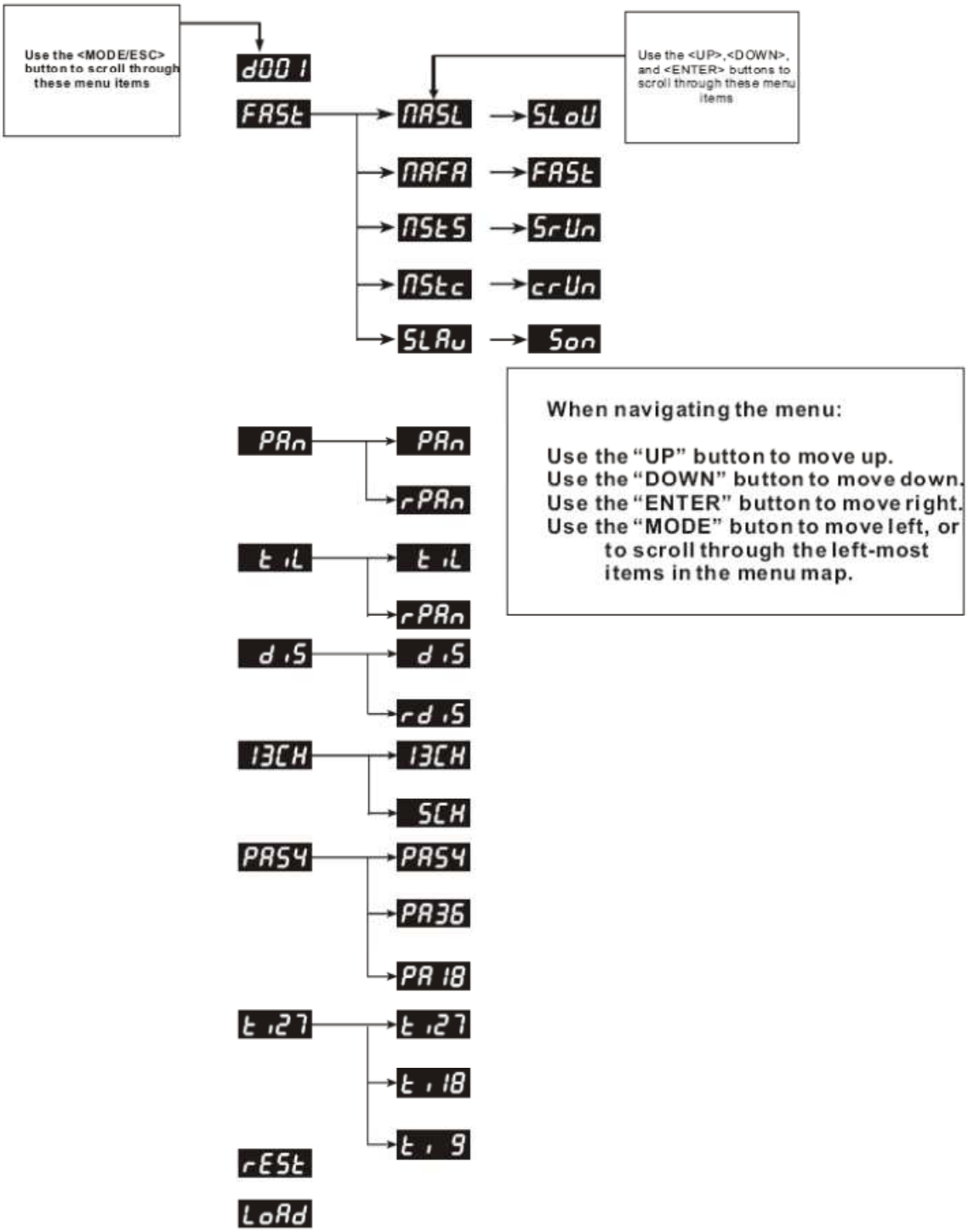
10.1. Navigate in the control display

To adjust the functions, use the 4 buttons below the display.

Button	Function
<MODE/ESC>	Used to access the menu or to return to a previous menu option
<UP>	Scrolls through menu options in ascending order
<DOWN>	Scrolls through menu options in descending order
<ENTER>	Used to select and store the current menu or option within a menu



11. Menu overview



12. User adjustments

12.1. Invert pan

1. Press the “MODE” button until “PAN” or “rPAN” appears in the display.
2. Use the “UP/DOWN” buttons to select the requested adjustment and then press enter.

12.2. Invert tilt

1. Press the “MODE” button until “t iL” or “rt iL” appears in the display.
2. Use the “UP/DOWN” buttons to select the requested adjustment and then press enter.

12.3. Flip display

1. Press the “MODE” button until “d iS” or “rd iS” appears in the display.
2. Use the “UP/DOWN” buttons to select the requested adjustment and then press enter.

12.4. Select DMX mode

1. Press the “MODE” button until “12CH” or “4CH” appears in the display.
2. Use the “UP/DOWN” buttons to select the requested adjustment and then press enter.

12.5. Adjust maximum pan range

1. Press the “MODE” button until “PA54”, “PA36” or “PA18” appears in the display.
2. Use the “UP/DOWN” buttons to select the requested adjustment and then press enter.

12.6. Adjust maximum tilt range

1. Press the “MODE” button until “Ti27”, “Ti18” or “Ti9” appears in the display.
2. Use the “UP/DOWN” buttons to select the requested setting and then press enter.

12.7. Service functions

12.7.1. Reset device

1. Press the “MODE” button until “rESt” appears in the display.
2. Press enter.

12.7.2. Set to factory default

1. Press the “MODE” button until “LoAd” appears in the display.
2. Press enter.

13. Mode of operation

13.1. Stand alone mode (Auto Mode)

This mode allows to use the device without DMX-controller by pre-programmed movement, included two speed options.

1. To configure the device for fast auto-mode, choose “NAFA”. The display shows “FASt”.
2. To configure the device for slow auto-mode, choose “NASL”. The display shows “SLoW”.

13.2. Master/Slave mode

This mode allows to link up to 32 devices and to use them without DMX-controller.

1. Use standard DMX-cables to connect the devices to each other. It could be useful to use a DMX-terminator after last device in the DMX-line.
2. Set the first device in the DMX-line as master. Choose “NAFA/NASL” or “NStS”, depending on which program you want to use.
   Master auto “NAFA” or “NASL”
   Master sound to light “NStS” (SrUn appears in the display).
3. Set all the other devices to slave mode. Select “SLAv” in the menu with the “UP/DOWN” buttons. They will react like the master.
   Slave “SLAv” will be shown as “Son” in the display.

13.3. DMX mode

In this mode you can control the device by every usual in trade DMX controller. The default address is “001” and will be shown in the display as “d001”. Adjust the addresses of the devices according to the addresses which are adjusted at the controller.

14. DMX Values (Spot) 13 channels

CHANNEL	VALUE	FUNCTION
1	000 ~ 255	Pan
2	000 ~ 255	Pan Fine
3	000 ~ 255	Tilt
4	000 ~ 255	Tilt Fine
5	000 ~ 255	Vector Speed: (Normal → Slow)
		Dimmer/Strobe
6	000 ~ 007	Closed
	008 ~ 134	100-0%
	135 ~ 239	Strobe(slow → fast)
	240 ~ 255	Open
		Red
7	000 ~ 255	0-100%
		Green
8	000 ~ 255	0-100%
		Blue
9	000 ~ 255	0-100%
		Color Macros
10	000 ~ 007	No Function
	008 ~ 021	White
	022 ~ 034	Red
	036 ~ 049	Green
	050 ~ 063	Blue
	064 ~ 077	Cyan
	078 ~ 091	Magenta
	092 ~ 105	Yellow
	106 ~ 119	Purple
	120 ~ 133	Orange
	134 ~ 147	Chartreuse
	148 ~ 161	Pink
	162 ~ 175	Brown
	176 ~ 189	Gold
	190 ~ 203	Crimson
	204 ~ 217	Violet
	218 ~ 231	Crape
	232 ~ 255	Color-Change Macro1
11	000 ~ 255	Vector Speed (Color)
		Movement Macros
12	000 ~ 007	No Function
	008 ~ 022	Auto Program 1
	023 ~ 037	Auto Program 2
	038 ~ 052	Auto Program 3
	053 ~ 067	Auto Program 4
	068 ~ 082	Auto Program 5
	083 ~ 097	Auto Program 6
	098 ~ 112	Auto Program 7
	113 ~ 127	Auto Program 8
	128 ~ 142	Sound Active 1
	143 ~ 157	Sound Active 2
	158 ~ 172	Sound Active 3
	173 ~ 187	Sound Active 4
	188 ~ 202	Sound Active 5
	203 ~ 217	Sound Active 6
	218 ~ 232	Sound Active 7
	233 ~ 255	Sound Active 8
13		Gobo
	80 - 94	GOBO1 Shake
	95 -109	GOBO2 Shake
	110 - 124	GOBO3 Shake
	125 - 139	GOBO4 Shake
	140 - 154	GOBO5 Shake
	155 - 169	GOBO6 Shake
	170 -184	GOBO7 Shake
	185 - 199	GOBO8 Shake
	200 - 214	GOBO9 Shake
	215 - 235	Positive rainbow effect with increasing speed
	236 - 255	Negative rainbow effect with increasing speed

15. DMX Values (Wash) 12 channels

CHANNEL	VALUE	FUNCTION
1	000 ~ 255	Pan
2	000 ~ 255	Pan Fine
3	000 ~ 255	Tilt
4	000 ~ 255	Tilt Fine
5	000 ~ 255	Vector Speed:(Normal → Slow)
		Dimmer/Strobe
	000 ~ 007	Closed
	008 ~ 134	100-0%
6	135 ~ 239	Strobe(slow → fast)
	240 ~ 255	Open
		Red
7	000 ~ 255	0-100%
		Green
8	000 ~ 255	0-100%
		Blue
9	000 ~ 255	0-100%
		Color Macros
	000 ~ 007	NoFunction
	008 ~ 021	White
	022 ~ 034	Red
	036 ~ 049	Green
	050 ~ 063	Blue
	064 ~ 077	Cyan
	078 ~ 091	Magenta
	092 ~ 105	Yellow
	106 ~ 119	Purple
	120 ~ 133	Orange
10	134 ~ 147	Chartreuse
	148 ~ 161	Pink
	162 ~ 175	Brown
	176 ~ 189	Gold
	190 ~ 203	Crimson
	204 ~ 217	Violet
	218 ~ 231	Crape
	232 ~ 255	Color-Change Macro1
11	000 ~ 255	Vector Speed(Color)
		Movement Macros
	000 ~ 007	NoFunction
	008 ~ 022	Auto Program 1
	023 ~ 037	Auto Program 2
	038 ~ 052	Auto Program 3
	053 ~ 067	Auto Program 4
	068 ~ 082	Auto Program 5
	083 ~ 097	Auto Program 6
	098 ~ 112	Auto Program 7
12	113 ~ 127	Auto Program 8
	128 ~ 142	SoundActive1
	143 ~ 157	SoundActive 2
	158 ~ 172	SoundActive 3
	173 ~ 187	SoundActive 4
	188 ~ 202	SoundActive 5
	203 ~ 217	SoundActive 6
	218 ~ 232	SoundActive 7
	233 ~ 255	SoundActive 8

DMX Channel Values (5 Channel for Spot)

CHANNEL	VALUE	FUNCTION
1	000 ~ 255	Pan
2	000 ~ 255	Tilt
3		Dimmer/Strobe
	000 ~ 007	Closed
	008 ~ 134	100-0%
	135 ~ 239	Strobe(slow → fast)
	240 ~ 255	Open
4		Color Macros
	000 ~ 007	NoFunction
	008 ~ 021	White
	022 ~ 034	Red
	036 ~ 049	Green
	050 ~ 063	Blue
	064 ~ 077	Cyan
	078 ~ 091	Magenta
	092 ~ 105	Yellow
	106 ~ 119	Purple
	120 ~ 133	Orange
	134 ~ 147	Chartreuse
	148 ~ 161	Pink
	162 ~ 175	Brown
	176 ~ 189	Gold
	190 ~ 203	Crimson
	204 ~ 217	Violet
	218 ~ 231	Crape
	232 ~ 255	Color-Change Macro1
5		Gobo
	80 - 94	GOBO1 Shake
	95 -109	GOBO2 Shake
	110 - 124	GOBO3 Shake
	125 - 139	GOBO4 Shake
	140 - 154	GOBO5 Shake
	155 - 169	GOBO6 Shake
	170 -184	GOBO7 Shake
	185 - 199	GOBO8 Shake
	200 - 214	GOBO9 Shake
	215 - 235	Positive rainbow effectwith increasing speed
	236 - 255	Negative rainbow effectwith increasing speed

DMX Channel Values (4 Channel for Wash)

CHANNEL	VALUE	FUNCTION
1	000 ~ 255	Pan
2	000 ~ 255	Tilt
3		Dimmer/Strobe
	000 ~ 007	Closed
	008 ~ 134	100-0%
	135 ~ 239	Strobe(slow → fast)
	240 ~ 255	Open
4		Color Macros
	000 ~ 007	NoFunction
	008 ~ 021	White
	022 ~ 034	Red
	036 ~ 049	Green
	050 ~ 063	Blue
	064 ~ 077	Cyan
	078 ~ 091	Magenta
	092 ~ 105	Yellow
	106 ~ 119	Purple
	120 ~ 133	Orange
	134 ~ 147	Chartreuse
	148 ~ 161	Pink
	162 ~ 175	Brown
	176 ~ 189	Gold
	190 ~ 203	Crimson
	204 ~ 217	Violet
	218 ~ 231	Crape
	232 ~ 255	Color-Change Macro1

16. Technical data

WEIGHT & DIMENSIONS

Length	6.8 in (173 mm)
Width	6.8 in (173 mm)
Height	9.8 in (249 mm)
Weight	8.3 lbs (3.8 kg)

POWER

Switch-selectable power settings	120V 60Hz AC or 230V 50Hz
Fuse	2A 250V
Power Consumption	68.1W (0.60A) Max at 120V
Inrush Power	83.6W (1.41A) inrush at 120V
Power Factor	0.92

LIGHT SOURCE

LED	1, 14W RGB 50,000hrs

PHOTO OPTIC

Beam Angle	13°
Illuminance at 1M	100 fc (1,076 lux)

RANGE

Pan	540°
Tilt	270°

THERMAL

Maximum ambient temperature	104° F (40° C)

CONTROL & PROGRAMMING

Data input	locking 3-pin XLR male socket
Data output	locking 3-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols	DMX-512 USITT
DMX Channels	5 or 13

Importeur:

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